## MUSEUM OF FINE ARTS

BOSTON, MASSACHUSETTS 02115



February 8, 1968

Research Laboratory

Mr. John J. Ford, Jr. Numismatist 176 Hendrickson Avenue Rockville Centre Long Island, New York

Dear Mr. Ford:

As previously stated in my letter of February 5th, the method of analysis was X-ray fluorescence of the obverse and reverse of each coin positioned in the spectrograph and the counts per element registered on a Brown Recorder. Each coin was run five different times with a slightly different position of the surface being exposed to the X-radiation. The five readings were computed and the counts-per-second averaged. They were then calibrated against a 24k gold standard or 100% gold, 18k or 75% gold, along with 14k or 58.33% gold.

From these gold standards working curves were made from the counts-per-second readings and, because of the variations of the surface of the coin, we felt only justified in rounding the figure off to the nearest decimal point, indicating the following analyses:

	Parts per 1000	Parts Silver	Copper	Iron
Coin USAOG-111 Prop. of: Harry J. Forman Philadelphia, Pennsylvania	910	80		- 10 parts no occounted
Coin USAOG-104 Prop. of: Werner Amelingmeier Merrick, New York	890	90	5-10	10-15
Coin USAOG- Prop. of: Henry H. Clifford Los Angeles, California	880	85	30	Trace 5

February 8, 1968 Mr. John J. Ford, Jr.: Therefore, coin USAOG-111 would indicate 910/1000 fine gold with 80/1000 fine silver. I feel because five analyses were made on each side of the coin and averaged that the results represent a reasonable analysis of coins. These were then compared with the specific gravity of each coin and I feel a reasonably accurate analysis was obtained. Hoping you will find the above explanation satisfactory, Yours truly, Florence E. Whitmore Technical Assistant FEW/sbh AIR MAIL SPECIAL DELIVERY